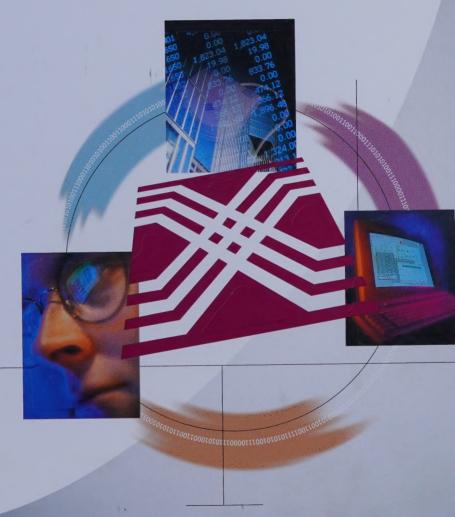
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ANNUAL REPORT

1997

CROSSKEYS SYSTEMS CORPORATION CHRONOLOGY

1	July 1992	Commenced operations.	12	May 1996	Awarded the Canadian Advanced Technology
2	April 1993	Ended its first fiscal year with revenues of \$87,000.			Association's (CATA) Award for Emerging Technology
3	July 1993	Released its first product, KeyNotes.			for innovation in product development.
4	April 1994	Ended its second fiscal year with revenues of \$2.9M.	13	July 1996	Officially opened its South American office.
5	February 1995	Established CrossKeys Systems Incorporated in the	14	October 1996	Opened its new 90,000 sq. foot corporate
		United States.			headquarters in Kanata, Ontario.
6	March 1995	Obtained ISO 9001 certification, one of the youngest companies in Canada to be certified.	15	November 1996	Officially launched Resolve, its Service Level Agreement (SLA) Manager, worldwide at the
7	April 1995	Marked the end of its third fiscal year with revenues			Network Management Forum (NMF) Product Expo
		of \$10M and reached 100 employees.			in Barcelona, Spain.
		Established CrossKeys Networks Limited in the U.K.	16	December 1996	Successfully completed a private placement
8	October 1995	Formed a partnership with Digital Equipment			with proceeds of \$8.8M.
		Corporation to develop service management solutions			Announced its second major contract with Siemens
		for Digital's TeMIP platform.			AG, their Public Communications Network Group.
9	December 1995	Named one of Canada's 50 Best Managed Private	17	March 1997	Announced the first sale of Resolve.
		Companies in a national competition sponsored by			Launched Altus, its performance and traffic
		Arthur Andersen & Co.			management products at CeBIT '96 in
		Recognized by the City of Kanata with its 1995 Award			Hannover, Germany.
		for Entrepreneurial Excellence in Technology.	18	April 1997	Ended its fifth fiscal year with record revenues
10	March 1996	Acquired the TeMIP-based expertise and assets of MPR			of \$21.5M and 232 employees.
		Teltech Ltd.			Opened a sales and support office in Melbourne,
11	April 1996	Ended its fiscal year with an increase in the research			Australia.
		and development team from 62 to 101 and doubled			Announced the signing of a major contract with
		the number of regional offices, with revenues of \$10M.			Hungarian Telecommunications Co. Ltd. (HTC)
					for Altus, CrossKeys performance and traffic management application.

1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1996 | 1997 | 1996 | 1997 | 1996 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 19

CROSSKEYS PRODUCTS

Resolve™ is CrossKeys service level management application for data networks that is configurable on multivendor platforms such as the Newbridge 46020 MainStreet® Network Manager and the Digital Equipment Corporation TeMIP platform. Resolve pro-actively manages the relationship between service providers and their customers which enables the service provider to offer the best level of service and remain ahead of the competition.

Network management solutions extend the capabilities of the Newbridge 46020 MainStreet® Network Manager, managing a variety of technologies — ATM (Asynchronous Transfer Mode), Frame Relay and TDM (Time Division Multiplexing). Applications include reporting and billing capabilities, network planning and maintenance, and enabling object note attachment to network mapping.

Altus™ is CrossKeys performance and traffic management application that allows service providers to operate voice networks with increased call completion. This truly multivendor application allows the service provider to reduce their capital investment by maximizing the utilization of and communications among their existing multivendor equipment.

Multivendor network management solutions enable seamless and integrated network level management by providing flexibility to provision multivendor equipment, under the control of either the Newbridge 46020 MainStreet® Network Manager or the Digital TeMIP™ (Telecommunications Management Information Platform).

CrossKeys Systems Corporation delivers software products and services, which are used by telecommunications service providers to provide their customers with differentiated services, to implement new technologies and to manage equipment from multiple vendors.

Fiscal 1997 was an exhilarating year for CrossKeys. Revenues increased 112% and the Company broadened its product offering with the successful deployment of two new applications, while creating multiple enhancements to its original product lines. CrossKeys now has ten sales offices in eight countries to assist in maintaining and building stronger relationships with its customers and other leading partners within the telecommunications industry.

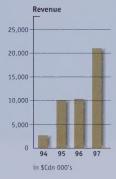
CrossKeys has further diversified its partner base. In addition to an affiliation with Newbridge Networks Corporation, CrossKeys benefits from a strong relationship with Digital Equipment Corporation and most recently with Siemens AG. Working in conjunction with these, and other industry leaders, enables CrossKeys to provide more complete, high quality and scalable products which enable the service providers to better meet the demands of their top customers.

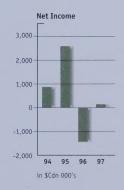
FINANCIAL HIGHLIGHTS

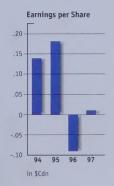
(in thousands of Canadian dollars, except per share amounts)

	1997	% change	1996	% change	1995	% change	1994
Revenue	21,465	112	10,108	1	10,046	245	2,908
Net Income (Loss)	163	-	(1,486)	-	2,638	190	911
Earnings per Share	0.01	-	(0.09)	-	0.18	29	0.14
R&D Expenses	5,892	28	4,617	150	1,844	65	1,118
Headcount	232	44	161	81	89	85	48









CHAIRMAN'S REPORT TO SHAREHOLDERS



When we formed CrossKeys Systems Corporation in 1992, we believed that a company focused on telecommunications management software would have rich opportunities. I am pleased to report that in fiscal 1997 your company delivered record revenues, broadened its customer base and introduced two new product lines, all of which demonstrate the excellent progress in being that company.

Industry analysts support our vision and believe that the market for telecommunication management software will support several sizable companies. Deregulation has provided a global environment for rapid growth in the telecommunications market. As a result of competition, service providers are aggressively pursuing the lucrative opportunities of offering advanced business services.

New entrants, eager to rapidly deploy services and win market share, are using CrossKeys applications software as one of the building blocks to establish competitive advantage. Established telecommunication companies are assessing their existing infrastructure and re-tooling to incorporate new technologies, including CrossKeys network and service management applications, in order to retain their market share.

For established and new service providers alike, software is critical in the battle for competitive advantage. Network and service management software is the key to securing customer relationships through managing complex network infrastructures and deploying differentiated services rapidly, reliably and cost effectively.

CrossKeys has achieved a significant industry advantage by focusing on applications development that leverages industry leading platforms from our strategic partners. Through this applications focus, CrossKeys has established a close relationship with customers, a clear product development plan, and a well developed partnership strategy.

Building a world-class company requires a combination of vision and common sense. CrossKeys' knowledge of its customers and their needs, coupled with an ongoing commitment to deliver a strong and sustainable bottom line, ensures that we have the products and the relationships to capitalize on emerging opportunities around the world.

Terence H. Matthews

Chairman of the Board

PRESIDENT'S REPORT TO SHAREHOLDERS

The corporate mandate that CrossKeys Systems Corporation was founded on continues to be strengthened every year. Our objective then, as it is now, is to emerge as the world's preferred supplier of telecommunications management applications software.

Through our product focus and the hard work of our team, we have established a steady string of successes in delivering high value solutions. Couple this with the depth of our experience and our strong relationships with other industry leaders. The result – CrossKeys is now recognized as a company that understands telecommunications management requirements, and as a company that delivers applications software that facilitates rapid service deployment and ongoing competitive advantages to telecommunications service providers.

Financial results from fiscal 1997 reflect our advancing position within the market: revenues increased, channels to market diversified significantly, our cash position strengthened and our order backlog is the highest it has ever been.

In 1997 we continued to focus the Company's strategies in order to realize our goal of leadership in telecommunications management software. CrossKeys' product development efforts target two fast-growing areas: network management; and service management, particularly in the functional areas of performance, accounting and configuration management. These are the market segments we intend to dominate.

Three factors are critical to the Company's ability to lead this global market: a strong focus on product-based solutions; strategic partnerships; and extending our global reach. This year CrossKeys made significant progress on all three fronts.

Products – We continued to successfully advance our product and platform diversification strategy, by developing network and service management applications that operate on multiple platforms, with initial deployment on the Newbridge 46020 MainStreet[®] Network Manager and the Digital TeMIP™ (Telecommunications Management Information Platform). In fiscal 1997 we successfully launched two flagship products, Resolve – our multi-platform service level management application and Altus – our TeMIP-based voice performance and traffic management product line.

Our product oriented strategy provides compelling time-to-market and cost saving advantages to service providers. Furthermore, it lets them focus their resources on their core businesses. This is clearly the future of the telecommunications software industry.

Service providers are under tremendous pressure to introduce differentiated services and to meet the performance commitments contained in Service Level Agreements with key business customers. CrossKeys network and service management applications let them do this today, across a rich suite of TDM, ATM, and Frame Relay networks. As CrossKeys continues to invest in forward thinking product development, our customers will continue to benefit from leading edge solutions.



PRESIDENT'S REPORT TO SHAREHOLDERS

Partnerships – In fiscal 1997 we diversified and deepened our partnerships with Newbridge Networks Corporation, Siemens AG and Digital Equipment Corporation. In addition, we continue to work closely and build on relationships with other major telecommunications suppliers.

Proof of our deepening relationships came with a Q2 award of a \$12.9 million contract with Siemens to co-develop an element management product for the ATM MainStreetXpress 36190 Core Services Switch. Further evidence of our strengthened position is seen in our relationship with Digital. CrossKeys' two new applications, Resolve and Altus, are both integrated with the Digital TeMIP platform.

Global reach – Fiscal 1997 saw significant revenue growth driven by the efforts of our growing direct sales force. CrossKeys opened new offices in Australia and Brazil and increased its presence in Germany, boosting the number of worldwide offices to ten in eight countries. CrossKeys now has in excess of 140 customers, and of those more than 120 are telecommunications service providers.

CrossKeys Systems Corporation is in an extremely exciting position as it enters fiscal 1998 and we will continue to develop these three areas critical to our success. I am confident in the quality and value of our products, the skills of our people, and the clarity of our vision for the future. With this foundation, CrossKeys has the encouraging prospect of emerging as an industry leader.

Fiscal 1997 was clearly a successful year for CrossKeys Systems Corporation. More importantly, it demonstrates that we are on track to reach our full potential.

John Selwyn

President

CrossKeys has always been an enthusiastic and energetic company. Our high level of motivation has stemmed from a belief that our unique approach to the market represents the best long term value for service providers. In fiscal 1997, the proof that our investments in global sales, product development and partnerships were paying off added an intangible factor — confidence.

Quarter by quarter we saw our order bookings grow, finishing fiscal 1997 with a 112% increase in revenues. We expanded our customer base, diversified our revenue stream and grew our team to 232 members. Our first offering memorandum attracted the attention of blue chip institutional investors and successfully raised \$8.8 million through a private placement of common shares, which further solidified our cash position.

CrossKeys successfully introduced two new powerful software solutions for the service management of data networks



and the performance management of voice networks – Resolve and Altus. We extended the capabilities of our network and multi-vendor product lines which manage ATM (Asynchronous Transfer Mode), TDM (Time Division Multiplexing) and Frame Relay networks.

Confidence builds when teams of enthusiastic software developers and business professionals work, time and again, with global leaders such as Digital Equipment Corporation, Siemens AG and Newbridge Networks Corporation to successfully deliver solutions to leading telecommunications operators. Network operators and telecommunications service providers like IXC, MGTI, Optus and Swiss PTT expect reliable, flexible, scaleable and standards-based management solutions. This is what CrossKeys is delivering.

The growth in our numbers compounds the energy, enthusiasm and confidence of our team – the result is real momentum towards aggressively pursuing a dominant market position.

OUR OPPORTUNITY

"Our success is grounded in a deep understanding of the trends that are driving the telecommunications market, and knowing how to create network and service management software applications that meet our customers' needs."

Consider the situation facing service providers today. Deregulation of the telecommunications industry has led to increased competition among existing telecommunications companies, while encouraging the entrance of aggressive new suppliers. Cable operators, alternate access providers, wireless companies, the international arms of established carriers and even utility companies are all entering the scene, wanting a piece of a very lucrative pie.

The focus of new entrants and existing service providers is the delivery of business communications services such as high-speed data services, high-speed LAN interconnection, Internet and Intranet services, or advanced voice networks. Historically, in regulated markets, rolling out new services and developing software systems was a time and labor intensive in-house function, often resulting in significant implementation cycles of proprietary technologies, based on limited customer input.

Time-to-market delays are no longer acceptable. If a service provider cannot deliver what the customer demands, customers now have several options to obtain these services. This situation has accelerated the demand for highly automated and integrated software solutions that enable the rapid introduction and



management of new services, reliably, cost-effectively and with customer specified features.

Providing these software solutions is CrossKeys' area of excellence and is our greatest area of opportunity. CrossKeys is well positioned to meet the needs of both new and established service providers who require open, scaleable, multi-platform and multi-vendor management applications software.

New entrants are building delivery capabilities and are focused on specific segments of the telecommunications market. These new entrants tend to be smaller.

niche-oriented organizations with well defined sets of requirements and subsequently shorter purchasing decision cycles. New entrants are ideal prospects for purchasing the entire suite of CrossKeys products.

Incumbent service providers have existing infrastructures, established customer bases and strong financial positions. As a result, specific applications software, which can be integrated with legacy systems or provide new functionality to their existing networks, is of immediate benefit to these service providers. When the incumbents introduce new technologies, such as ATM, they have similar requirements to those of the new entrants.

CrossKeys' core competence is delivering network and service management applications in the functional areas of performance, accounting and configuration management. CrossKeys invests in the creation of products within this segment. We will continue to venture outside this area where development is funded by end customers or partners, and when doing so will strengthen our position within our core.



CrossKeys has built a solid reputation for providing multi-vendor solutions and to date has integrated equipment from ten of the leading hardware vendors on three of the industry dominant operating platforms. CrossKeys' products allow multiple users – from sales and marketing, to customer support, to operations – to utilize the information in ways that are most relevant to their role, in multi-vendor, multi-platform environments.

Service providers require advanced applications to deliver premium services demanded by their top customers. These applications enable rapid deployment, increased availability, flexible usage-based billing and network performance optimization. All of these attributes are increasingly being captured in contracts between business customers and service providers in the form of a Service Level Agreement (SLA).

CrossKeys is establishing a leading market position by delivering proactive service management applications. Resolve allows service providers to track performance levels and to alert the network operator when the network is nearing critical levels.

Pro-active performance and traffic management applications are as instrumental in the voice world as they are in the data world. Business and retail customers of telecommunication service providers demand

differentiated services developed on highly reliable networks. Altus provides performance and traffic management functions operable with voice switches from five of the six leading manufacturers.

CrossKeys will continue to focus on our strengths through continued investments, and possible acquisitions, to build the dominant position within this segment of the telecommunications market.

strengthen our position
within our core."

FAULT CONFIGURATION ACCOUNTING PERFORMANCE SECURITY

BUSINESS
MANAGEMENT
SERVICE
MANAGEMENT
NETWORK

"CrossKeys invests in the creation of network and service management applications in the functional areas of performance, accounting and configuration management. We will venture outside of this area where doing so will strengthen our position within our core"

MANAGEMENT

ELEMENT MANAGEMENT

OUR HISTORY

Every year, since founding the Company in 1992, we have made significant progress toward our vision of becoming the preferred supplier of software applications that service providers utilize to effectively manage today's complex telecommunications networks.



We have been steadily building the company – the people, the products and the processes – that we need to reach our goal. By fiscal 1994, the handful of CrossKeys founders had expanded to a team of 49, with revenues of \$2.9 million. The next year, revenues reached \$10 million and Kanata-based CrossKeys opened subsidiaries in the United States and United Kingdom. We also became one of the youngest companies in Canada to achieve ISO 9001 registration.

In fiscal 1996 we invested heavily in product development as well as our global sales infrastructure. We enhanced our sales presence in the United States and United Kingdom. We established new offices in Hong Kong, Germany, and Paris. We purchased the TeMIP assets of MPR Teltech Ltd. and through this acquisition opened

a second R&D center, located in Burnaby, British Columbia. Our headcount grew to 161, of which 127 were in the product development group.

From the beginning, CrossKeys recognized that achieving aggressive growth requires strategic partnerships. Our strategy is to partner with platform vendors and leading equipment manufacturers for access to technologies, customers and sales channels. By leveraging the substantial investments made by our partners, CrossKeys concentrates its R&D efforts on building complementary, standards-based applications software.

We believe that the strategies CrossKeys has in place fit the business needs of our customers, match the trends in our industry and allow us to be an effective partner. Through five years of hard work and experience CrossKeys is positioned to play an increasingly dominant role within the telecommunications marketplace.

Entering fiscal 1998, CrossKeys is firmly positioned to continue delivering on our goals. We have our highest level of order backlog, our strongest product portfolio, a growing global presence, and increasingly diversified channel and sales distribution networks. All of our strategies and goals are based on our ultimate objective – to become the dominant supplier of software applications for network and service management in performance, accounting and configuration. In pursuit of our objective we will continue to:

Enrich our products

CrossKeys will continue to invest in its core product areas. CrossKeys will continue to advance our product portfolio through an aggressive product development program that continues to incorporate structured customer feedback on functionality and scheduling, continued investment in large network environment testing and strong after-sales support.

Grow our strategic partnerships

A key factor in the Company's success continues to be our ability to partner. We have demonstrated a partnership culture through our relationships with Newbridge, Digital and Siemens and we are committed to augmenting our existing partnerships with additional platform vendors and systems integrators. Within

a few years, the industry will see only a handful of companies emerge as the predominant platform vendors. CrossKeys is well positioned to partner with these companies.

Continue to build our team

Our future depends on continuing to attract and retain the best talent in our industry. We are ensuring that our people have the technical, business and leadership skills we need to achieve our growth and profitability targets.



When CrossKeys was formed we had a vision for our product and business futures and of the company that we wanted to be. We believe in broad employee ownership, we believe in delivering on our commitments, and we value bringing out the best in each other through teamwork. We are focused on delivering value to our customers and to our partners. These ideals are fundamental to CrossKeys Systems Corporation.

CHIEF FINANCIAL OFFICER'S REPORT



The fiscal year ending April 30, 1997 represented a year of growth and diversification. With the introduction of Resolve, a suite of service management capabilities for both Newbridge and Digital platforms and the addition of Altus, our voice performance and traffic management product line operating on Digital's TeMIP platform, the Company has significantly increased the breadth of its product offering. As well, the Company continued to invest in its sales and marketing infrastructure, opening locations in three new countries and expanding local presence in existing locations.

Revenues of \$21.5 million for fiscal 1997 reflected an increase of 112% over the \$10.1 million reported for fiscal 1996. This rapid growth reflected increased business in all regions, but particularly in Europe, Asia and South America. Newbridge, as our distributor, delivered record revenues for our NetworkWare product line, and our Digital TeMIP-based business grew substantially as telecommunications companies sought to upgrade their voice networks with our Altus products. In fiscal 1997, Siemens awarded CrossKeys the mandate to co-develop an element management product for the ATM MainStreetXpress 36190 Core Services Switch.

Product revenues of \$14.3 million grew \$6.3 million from the \$8.0 million reported in fiscal 1996 and represented 67% of total revenues, versus 79% the prior year. Service revenues grew to \$7.1 million, or 33% of revenues, versus \$2.1 million, or 21% of revenues, in fiscal 1996. The more rapid growth in service revenues reflects services performed under contract to our channel partners. The Company's overall gross margin declined slightly to 70% from 74% in fiscal 1996 due to the higher mix of services revenues, which have a lower gross margin than product revenues.

In fiscal 1997, despite investing nearly \$6 million in research and development and continued actions to expand our sales, marketing and support capabilities, overall spending levels began to trend toward industry comparables, as evidenced by total expenses declining to 69% of revenues from the 100% of revenues reported in fiscal 1996. At year end, the Company had 232 employees, an increase of 71 over the prior year.

The Company's revenues and earnings have been on an upward trend for the past five quarters. Net income for the year ending April 30, 1997 was \$0.2 million, compared to a loss of \$1.5 million in fiscal 1996. In December 1996 the Company completed a private placement of its common shares, raising \$8.8 million. Proceeds from this offering enhanced the Company's ability to take advantage of identified opportunities for growth.

Steven E. Spooner

Vice President and Chief Financial Officer

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Results of Operations

Net income for the year ended April 30, 1997 was \$0.2 million compared to a net loss of \$1.5 million in fiscal 1996. Revenues increased 112%, while operating expenses declined as a percentage of sales.

In fiscal 1997, the Company continued its strategy of broadening its product portfolio, expanding its sales and support capabilities, enhancing the Company's image and the awareness of its products in the marketplace and securing additional distribution channels to market. Spending on research and development also increased. Initiatives in these areas were funded primarily through increased revenue growth, to ensure the Company made progress on its goal of achieving an overall cost structure more comparable to industry standards.

Significant new investment was made in our Resolve service level management product line. Additional investments were also made to reduce the platform release dependencies of our NetworkWare products, and to further enhance our Altus line of voice traffic and performance products. Testing capabilities were augmented through the implementation of improved systems and processes and by hiring additional test engineering staff.

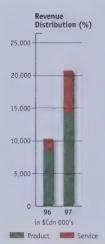
The Company continued to leverage its investment in Digital Equipment Corporation's TeMIP-based products and service capabilities. Digital-based business grew to 19% of revenues in fiscal 1997, up from 1% the previous year. One of the Company's goals was to recruit a third strategic partner in 1997 and this was achieved with the award of the largest contract in the Company's history - a \$12.9 million product mandate to co-develop ATM element management software for the Siemens 36190 switch. The Company expects this contract to lead to ongoing product royalties, support revenues and future product enhancements, as well as the potential to market the technology developed by CrossKeys to other customers.

Additional investments were made in sales and marketing in fiscal 1997, with the opening of new sales locations. The Company now operates in eight countries and is benefiting from new opportunities and the continued diversification of its customer base. Investments were also made to develop the Company's customer support capabilities with the addition of project management and customer engineering personnel.

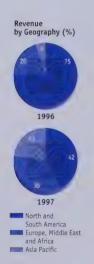
The Company's year end head count grew from 161 in 1996 to 232 at April 30, 1997. Revenue per employee increased from \$80,000 in 1996 to \$110,000 in 1997.

Revenues rose 112% in fiscal 1997 to \$21.5 million as increases in all product lines were recorded. The most significant increase was in the multi-vendor network management product line (MVNM), with work commencing for Siemens AG to develop ATM element management software. Investments made in both the TeMIP-based assets of MPR Teltech, acquired in fiscal 1996, and our partnership with Digital drove revenue in the Altus product line to \$4.2 million in 1997, compared to \$100,000 in fiscal 1996. The first sales of the Company's Resolve product line were also recorded. Sales into all three of the Company's principal geographic areas rose relative to 1996, with the Asia Pacific and European sales regions showing the strongest growth. Sales in the North and South America region increased 18% over fiscal 1996, but decreased in relative terms as a percentage of total sales.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS



Product revenues exceeded \$14 million in fiscal 1997.



Investments in local sales and support infrastructure enabled rapid growth in Europe, Asia and South America.

Product revenue increased from \$8.0 million in fiscal 1996 to \$14.3 million in fiscal 1997. Service revenue for the same period rose from \$2.1 million to \$7.1 million. The most significant product revenue increases were from customer-funded product development for the MVNM and Altus product lines and license sales of the Company's Resolve product line. Service revenue increases came as sales of support services for more mature product lines increased and as a result of higher levels of contract R&D services to channel partners.

In fiscal 1997, the Company's revenue stream continued to strengthen and diversify. In fiscal 1997, while sales via the Newbridge channel increased in absolute terms, they declined as a percentage of revenues to 56%. Sales from Siemens and Digital-based business grew to 25% and 19% respectively. In fiscal 1997 the company had six customers generating revenue of more than \$1 million compared to only one the previous year. The Company's client list has grown to 140 customers in 40 countries.

Cost of Sales

Cost of sales rose \$3.8 million in fiscal 1997 from 26% of revenue in fiscal 1996 to 30% of revenue in fiscal 1997, driven largely by the strong growth in service revenue. Royalties on license sales also increased due to the increase in product sales and the broader product portfolio.

Gross Margin

Gross margin doubled to \$15 million in fiscal 1997 compared to \$7.5 million in fiscal 1996, driven by strong growth in both product and service revenue. The margin as a percentage of sales declined to 70% in 1997 compared to 74% in 1996 largely as a result of higher costs associated with the delivery of increased service revenue in fiscal 1997.

Research and Development

Absolute spending levels in R&D expenses increased to \$5.9 million from \$4.6 million, but declined as a percentage of revenue from 46% in fiscal 1996 to 27% in fiscal 1997. The company invested heavily in the Resolve product line as a result of the decision in fiscal 1996 to pursue the service level management market. Additional investments were made in the Altus product line to enhance voice traffic management capabilities and in the NetworkWare product line to provide the company with product release independence. In addition, the Company increased its spending on product verification and testing to enhance product quality.

Sales, General and Administration

Sales, general and administration (SG&A) expenses increased \$3.5 million to \$9.0 million in fiscal 1997, but declined as a percentage of revenue from 54% in fiscal 1996 to 42% in fiscal 1997. The Company opened new sales offices in Australia and Brazil, and increased its presence in Germany, the United Kingdom and Hong Kong. The Company also significantly increased spending on marketing to increase its visibility through industry trade publications and trade shows and for new product introductions in the Altus and Resolve product lines.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Interest Income and Expense

Interest income of \$332,000 declined in fical 1997 as interest rates declined relative to 1996. Interest expense of \$227,000 increased relative to 1996 as the company recorded a full year of payments on lease obligations entered into during 1996.

Income taxes

The composite rates of income tax for the Company vary from the statutory rates primarily as a result of the application of certain deductions related to R&D expenditures in Canada. Future changes in the composite rate of income tax will be primarily due to the relative profitability of operations and the national tax policies in each of the various countries in which the Company operates. Management believes that the composite rate of income tax will remain lower than the statutory rate because of the deductions related to R&D expenditures in Canada as well as other tax planning measures undertaken by the Company.

Net Income

Net income of \$0.2 million for fiscal 1997 compares to a net loss of \$1.5 million in fiscal 1996. The increase reflects the growth in revenue and the decline in operating expenses as a percentage of revenue. Earnings per share were one cent in fiscal 1997 compared to a loss of nine cents in fiscal 1996.

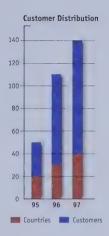
Financial Condition

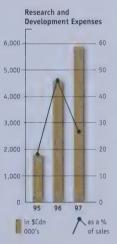
During fiscal 1997 working capital increased \$8.1 million, from \$5.5 million to \$13.6 million. At April 30, 1997 the company had \$11.1 million of cash and cash equivalents, an increase of \$4.6 million versus the previous year. The increase was primarily the result of \$11.6 million of share issuances including an \$8.8 million private placement financing, offset by cash used in operations of \$1.9 million, investments in capital expenditures of \$3.8 million, and repayment of lease obligations of \$1.1 million. The increase in working capital is primarily due to increases in accounts receivable of \$4.8 million and in unbilled receivables of \$1.4 million associated with the higher revenue volumes, offset by higher levels of deferred revenue. Accounts payable and accrued liabilities also increased, given higher operating expense run rates.

Existing short term bank credit facilities include \$3.0 million of working capital facilities with Royal Bank of Canada bearing interest at Canadian prime plus one quarter. At April 30, 1997, none of the credit facilities is drawn as bank indebtedness.

Management anticipates higher capital expenditures again in fiscal 1998 as the Company increases its focus on automated product testing and verification and supports new product initiatives. In addition, the Company may make investments in, or acquisitions of, companies, products or technologies which extend or enhance its business and help to diversify its marketing and distribution channels. The Company also continues to seek additional strategic partnerships.

Management believes that the Company's liquidity in the form of existing cash resources and its credit facilities will prove adequate to meet its operating and capital expenditure requirements at least through the end of fiscal 1998. Management is confident that additional working capital financing can be obtained, as needed, from private or public equity sources.







MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Business Risks

A significant portion of the Company's quarterly sales are derived from products shipped against orders received in the same quarter. Quarterly revenues and, to a greater extent, net income could vary substantially as a result of unforeseen delays in deliveries or closing large sales, introductions of new or enhanced products by the Company or its competitors, seasonal patterns of customer capital expenditures, or other conditions affecting the networking industry in particular or the economy in general.

While the Company has broadened its customer base substantially in fiscal 1997, revenues remain concentrated in a few large accounts. The loss of a large customer could affect profitability. The Company is addressing this risk through continued efforts to build relationships with new customers.

As the Company increases its foreign operations, currency fluctuations could become more of a factor in reported financial results. The natural hedge provided by expenses incurred in foreign currencies is supplemented as appropriate with a formal hedging program to mitigate these risks.

The market for the Company's products is subject to intense competition, changing customer needs, evolving industry standards, frequent new product introductions and a changing regulatory environment. The Company attempts to address these risks by offering a broad portfolio of products and services, through ongoing monitoring of the competitive environment and by continued investment in product research and development.

Outlook

The Company expects a greater proportion of fiscal 1998 revenues to be derived from product license sales. Given the Company's plans to continue to expand local sales presence in emerging geographic regions, quarterly sales volumes will be subject to a high degree of variation. The Company plans to address this risk through broadening its customer base, strengthening its product portfolio and developing additional channels to market.

The telecommunications industry continues to experience rapid growth and change. Competition is expected to remain intense as telephone companies seek to differentiate themselves in an increasingly deregulated marketplace. Accordingly, management believes that increased expenditures on R&D will be necessary in the foreseeable future, although decreasing over time relative to overall sales volumes.

With the current trend toward deregulation in Europe and the large investments in telecommunications infrastructure being made in several countries in the Asia Pacific region, management expects increased business volumes in these regions, as well as increased investment by the Company in sales and support for these areas. While absolute spending levels in selling expenses are expected to rise, they should decline as a percentage of sales. Management also expects spending on general and administrative expenses to continue to grow, but decline as a percentage of sales.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

Management's confidence in the preparation of financial statements is derived from a system of internal financial controls. These controls are designed to provide assurance that transactions are legitimate, assets are fully accounted for and detailed records of all the Company's financial matters are accurate and consistently maintained. The statements are further supported by the estimates and judgments of management. Elaboration on specific issues is provided in the extensive notes to the financial statements.

The Audit Committee of the Board of Directors has full and unrestricted access to all financial records. It regularly fulfills its mandate to review ongoing financial commitments and operations in order to verify that the Company is in sound financial condition and to safeguard shareholders' equity.

Deloitte and Touche, the Company's auditors, have full and unrestricted access to all financial records and to the Audit Committee to discuss their audit and related findings as to the integrity of the Company's financial reporting and the adequacy of the system of internal controls. Their external audit is conducted in accordance with generally accepted auditing standards in order to obtain reasonable assurance that the financial statements are free of material misstatement.

AUDITORS' REPORT

To the Shareholders of CrossKeys Systems Corporation

We have audited the consolidated balance sheets of CrossKeys Systems Corporation as at April 30, 1997 and 1996 and the consolidated statements of income and retained earnings and changes in financial position for the years ended April 30, 1997, 1996 and 1995. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at April 30, 1997 and 1996 and the results of its operations and the changes in its financial position for the years ended April 30, 1997, 1996 and 1995 in accordance with generally accepted accounting principles.

Chartered Accountants

relatte + Touche

May 30, 1997

Ottawa, Canada

CONSOLIDATED STATEMENTS OF INCOME AND RETAINED EARNINGS

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)	1997	1996	1995
Product revenue Service revenue	\$ 14,346,711 7,118,390	\$ 8,029,325 2,078,702	\$ 8,275,880 1,769,820
Total revenue (Note 14)	21,465,101	10,108,027	10,045,700
Cost of sales	6,448,570	2,626,514	1,723,708
Gross margin	15,016,531	7,481,513	8,321,992
Expenses Research and development (Note 11) Selling, general and administration	5,891,614 8,987,214 14,878,828	4,616,997 5,475,127 10,092,124	1,844,307 2,413,869 4,258,176
Income (loss) from operations	137,703	(2,610,611)	4,063,816
Interest income Interest expense – long term debt	331,796 (227,271)	444,724 (191,276)	264,231 (103,588)
Income (loss) before income taxes	242,228	(2,357,163)	4,224,459
Income tax recovery (provision)	(79,528)	870,705	(1,586,620)
Net income (loss)	162,700	(1,486,458)	2,637,839
Retained earnings, beginning of year	2,125,280	3,611,738	973,899
Retained earnings, end of year	\$ 2,287,980	\$ 2,125,280	\$ 3,611,738

See accompanying Notes to the Consolidated Financial Statements

CONSOLIDATED BALANCE SHEETS

as at April 30, 1997 and 1996

(Canadian dollars)	1997	1996
Assets		
Current Assets		
Cash and cash equivalents	\$ 11,073,419	\$ 6,453,996
Accounts receivable	6,111,035	1,305,534
Unbilled receivables	1,860,734	466,480
Due from affiliate (Note 3)	147,126	-
Refundable investment tax credits	-	326,447
Shareholder loans receivable (Note 4)	312,901	495,645
Prepaid expenses and other current assets	655,424	120,982
	20,160,639	9,169,084
Long term receivable (Note 3)	400,800	_
Fixed assets (Note 5)	5,602,389	3,801,818
Investment tax credits (Note 6)	970,485	370,485
Goodwill (Note 7)	559,996	700,000
	\$ 27,694,309	\$ 14,041,387
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities	£ 2.200.152	¢ 1.007.031
Accounts payable and accrued liabilities Due to affiliate (Note 3)	\$ 3,290,152	\$ 1,907,031 70,351
Deferred revenue	2,296,358	635,201
Current portion of obligations under capital lease (Note 9)	926,678	1,038,299
current portion of obligations under capital lease (Note 9)	6,513,188	3,650,882
Obligations under capital lease (Note 9)	721,479	1,661,345
Other long term liabilities (Note 7)	721,475	125,000
other tong term dabilities (Note 1)	7,234,667	5,437,227
Shareholders' Equity	7,231,007	3,13,,22,
Share capital (Note 10) Common shares – 21,290,882 outstanding		
(1996 – 17,141,191 outstanding)	18,033,462	6,478,880
Accumulated foreign currency translation adjustment	138,200	0,470,000
Retained earnings	2,287,980	2,125,280
necumed carrings	20,459,642	8,604,160
	20,133,072	5,554,130
	\$ 27,694,309	\$ 14,041,387

See accompanying Notes to the Consolidated Financial Statements

Approved by the Board

John Selwyn Director

Terence H. Matthews

Director

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)	1997	1996	1995			
Net inflow (outflow) of cash related to the following activities:						
Operating						
Net income (loss)	\$ 162,700	\$ (1,486,458)	\$ 2,637,839			
Items not affecting cash	0.406.600	4.006.656	500.000			
Amortization Investment tax credits	2,106,698 (600,000)	1,236,656	522,202			
Deferred income taxes	(000,000)	(870,705)	491,338			
	1,669,398	(1,120,507)	3,651,379			
Changes in non-cash working capital items (Note 12)	(3,580,949)	273,287	759,694			
	(1,911,551)	(847,220)	4,411,073			
Financing						
Increase in obligations under capital lease	_	2,075,322	1,010,887			
Repayment of obligations under capital lease	(1,051,487)	(655,844)	(265,157)			
Proceeds on issue of common shares	11,554,582	1,934,169	3,038,491			
(Increase) in long term receivables	(400,800)	105.000	_			
Increase (decrease) in other long term liabilities Decrease (increase) in shareholder loans receivable	(125,000) 182,744	125,000 (329,098)	(71,337)			
Decrease (increase) in shareholder toans receivable	102,744	(329,030)	(/1,33/)			
	10,160,039	3,149,549	3,712,884			
Investing						
Acquisition (Note 7) Purchase of fixed assets,	-	(700,000)	-			
net of investment tax credits	(3,767,265)	(3,246,230)	(1,535,119)			
	(3,767,265)	(3,946,230)	(1,535,119)			
Increase (decrease) in cash and cash equivalents	4,481,223	(1,643,901)	6,588,838			
Effect of foreign currency translation on cash flow	138,200	-	-			
Cash and cash equivalents, beginning of year	6,453,996	8,097,897	1,509,059			
Cash and cash equivalents, end of year	\$ 11,073,419	\$ 6,453,996	\$ 8,097,897			

See accompanying Notes to the Consolidated Financial Statements

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)

1. Description of Business

The Company was incorporated on January 28, 1992 under the *Canada Business Corporations Act*. The Company provides custom network applications and value-added products for sophisticated and specialized telecommunication networks.

2. Accounting Policies

The financial statements have been prepared in accordance with generally accepted accounting principles and include the following significant accounting policies:

a) Basis of consolidation

The Consolidated Financial Statements include the accounts of the Company and its wholly-owned subsidiaries.

b) Cash equivalents

Cash equivalents consist of investments with terms to maturity of three months or less.

c) Foreign currency translation

The Consolidated Financial Statements are prepared using Canadian dollars. All operations whose principal economic activities are undertaken in currencies other than Canadian dollars have been determined to be self-sustaining.

d) Fixed assets

Fixed assets acquired by purchase are recorded at cost. Fixed assets acquired by capital lease are recorded at the present value of minimum lease payments. Amortization is calculated on a straight-line basis over the anticipated useful lives of the assets as follows:

Furniture and fixtures 5 years
Computer equipment 4 years
Software 2 years
Leasehold improvements lease term

e) Goodwill

Goodwill represents the excess of the purchase price over the fair value of net assets acquired and is amortized on a straight line basis over the estimated useful life of the goodwill. The future benefit of this asset is reviewed on an ongoing basis. When warranted by events or circumstances that might indicate that recoverability might be impaired, management will evaluate recoverability by use of the undiscounted cash flow method.

f) Revenue recognition

Product revenue consists of licensing of packaged software as well as customer funded product development, where the Company retains intellectual property rights and intends to re-license the technology to other customers. Service revenue consists of customer support and maintenance contracts, education, installation, commissioning and contract software development. Revenue from packaged software sales is recorded on shipment. Customer funded product development revenue is recognized on a percentage of completion basis. When payment is received prior to it being earned, the revenue is deferred until such time as the work is completed. Provisions for estimated warranty and project related costs are recorded in

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)

the period in which revenue is recognized. Service revenue is deferred and recognized over the period the services are provided.

q) Research and development costs

Current research costs are expensed as incurred. Costs of research and development assets, net of related investment tax credits, are capitalized and amortized. Development costs are deferred and amortized when the criteria for deferral under generally accepted accounting principles are met, or otherwise, are expensed as incurred.

3. Related Party Transactions

The Company leases premises from a company controlled by the Chairman of the Board of Directors, under terms and conditions reflecting prevailing market conditions at the time the lease was entered into. On April 12, 1996, the Company entered into a lease agreement for 59,093 square feet for 10 years expiring April 30, 2006 (approximately \$1,022,000 per year up to April 30, 2001). After May 1, 2001, the cost shall be re-negotiated based on market rates. The Company is further obligated to retain an additional 29,547 square feet for the period January 1, 1999 to April 30, 2006 under the same terms and conditions. During the fiscal year ended April 30, 1997, the Company paid \$810,610 (1996 – \$303,924) in rent for the leased premises.

During the fiscal year ended April 30, 1997, the Company sold approximately \$5,123,000 (1996 – \$3,563,000; 1995 – \$1,504,000) of product and \$2,889,000 (1996 – \$445,000; 1995 – \$327,000) of research and development services under normal terms and conditions to an affiliate, a significant shareholder of the Company. As at April 30, 1997, the Company had a net balance receivable from (owing to) the affiliate of \$147,126 (1996 – (\$70,351)).

During the year ended April 30, 1997, the Company sold approximately \$1,000,000 of product to a company in which a significant shareholder of the Company has an equity interest and which has the same Chairman of the Board of Directors as the Company. Under the terms of the sale, \$400,800 is receivable between May 1, 1998 and October 31, 1998, and the balance of the receivable is current.

The Company acted as a subcontractor to perform research and development activities pursuant to agreements with a company controlled by the Chairman of the Board of Directors. As part of these agreements, the Company was granted an option, which was exercised on May 9, 1994, to acquire the technology developed in consideration of 3,333,330 common shares of the Company as payment for such technology.

4. Shareholder Loans Receivable

During the fiscal year, the Company loaned \$457,482 (1996 – \$573,400) to its employees to acquire common shares of the Company. The loans bear no interest and are repayable in 26 equal instalments over one year. As at April 30, 1997, the shareholder loans receivable amounted to \$312,901 (1996 – \$495,645).

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)

5.	Fixed Assets		Accumulated	Net Book Value		
		Cost	Amortization	1997	1996	
	Furniture and fixtures	\$ 1,013,469	\$ 343,440	\$ 670,029	\$ 471,259	
	Computer equipment	5,637,236	1,934,635	3,702,601	2,473,218	
	Software	2,269,402	1,416,381	853,021	703,344	
	Leasehold improvements	413,521	36,783	376,738	153,997	
		\$ 9,333,628	\$ 3,731,239	\$ 5,602,389	\$ 3,801,818	

Fixed assets are recorded net of accumulated investment tax credits of \$257,973 (1996 \$257,973). Fixed assets include \$3,176,141 (1996 - \$3,675,821) of assets under capital lease.

6. Income Taxes

As at April 30, 1997, the Company has research and development costs of approximately \$2,700,000 which have not been claimed for income tax purposes, and which are available indefinitely to reduce future years' Canadian Federal taxable income. The Company also has unclaimed provincial losses totalling approximately \$6,600,000 which are available to reduce future years' Canadian Provincial taxable income. The losses expire in 2003 and 2004. Investment tax credits of approximately \$2,100,000 (1996 - \$1,100,000) are available to reduce future federal income tax payable, expiring in 2006 and 2007. Of the available tax credits, \$970,485 have been recognized in the financial statements.

The Company claims research and development deductions and related investment tax credits for income tax purposes, based on management's interpretation of the applicable legislation in the Income Tax Act of Canada. In the opinion of management, the treatment of research and development for income tax purposes is appropriate.

7. Acquisition

On March 1, 1996 the Company acquired the TeMIP technology based assets and staff of MPR Teltech Ltd., through an acquisition accounted for under the purchase method of accounting. The total consideration for this acquisition, including acquisition-related costs, was \$700,000, of which \$350,000 was paid through the issuance of 175,000 common shares. The balance of the consideration is comprised of \$100,000 of assimilation costs and \$125,000 paid during the fiscal year and another \$125,000 payable in the next fiscal year. As there were no net identifiable assets acquired in the transaction, the total acquisition price of \$700,000 has been recorded as goodwill and will be amortized on a straight line basis over five years. During the fiscal year, the Company recorded goodwill amortization of \$140,004 (1996 - \$nil, 1995 - \$nil).

Additional consideration may be payable in the event that the technology generates specified revenue levels in periods subsequent to the acquisition. Such consideration, which is payable in cash will be recorded, when determinable, as an additional cost of the purchase.

Bank Indebtedness

As at April 30, 1997 the Company has credit facilities totaling \$3.0 million of which none is drawn as bank indebtedness. The credit facility is repayable on demand and bears interest at Canadian prime plus one quarter. Any bank indebtedness outstanding under this credit

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)

facility is collateralized by general security agreements and requires the Company to maintain certain financial ratios.

9. Obligations Under Lease

The Company has various obligations under capital lease with interest rates ranging from 8.5% to 11.7% which mature between November 1997 and November 1999.

Obligations under operating lease expire up to April 2006.

Minimum lease payments due in each of the next five fiscal years are as follows:

	•	Obligations under Capital Lease	
	1997	1996	1997
1998	\$ 1,024,599		\$ 1,383,781
1999	659,867		1,639,776
2000	131,417		1,532,586
2001	****		1,532,586
2002			1,532,586
Thereafter			6,130,340
	1,815,883		\$ 13,751,655
Interest portion	(167,726)		
Total	\$ 1,648,157 \$	2,699,644	
Current portion	(926,678)	(1,038,299)	
	\$ 721,479	1,661,345	

10. Share Capital

Authorized

An unlimited number of common shares and an unlimited number of preference shares issuable in series.

v 1	Commo	n Shares	
Issued	Number	Amount	
Outstanding, April 30, 1994	10,388,690	\$ 1,506,220	
Issued for cash	2,422,791	3,038,489	
Issued to affiliate (Note 3)	3,333,330	2	
Outstanding, April 30, 1995	16,144,811	\$ 4,544,711	
Issued for cash	790,414	1,578,827	
Issued under Stock Option Plan	30,966	5,342	
Issued for acquisition (Note 7)	175,000	350,000	
Outstanding, April 30, 1996	17,141,191	\$ 6,478,880	
Issued for cash	3,886,262	11,513,310	
Issued under Stock Option Plan	263,429	41,272	
Outstanding, April 30, 1997	21,290,882	\$ 18,033,462	

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)

Employee stock option plan

The Company has established the CrossKeys Systems Corporation Key Employee Stock Option Plan applicable to employees and directors of the Company. The options are granted at the Company's estimate of the then-current fair market value of the common shares of the Company and may generally be exercised in equal portions during the years following the second, third and fourth anniversary of the date of grant, and expire on the earlier of the fifth anniversary or termination of employment.

Activity in the stock option plan is summarized below.

	Options	Option price
Options outstanding, April 30, 1994	1,652,500	\$0.10 - \$1.00
Granted	333,700	\$1.25 - \$1.75
Options outstanding, April 30, 1995	1,986,200	\$0.10 - \$1.75
Granted	411,700	\$1.75 - \$2.00
Exercised	(30,966)	\$0.10 - \$0.25
Canceled	(38,367)	\$0.25 - \$2.00
Options outstanding, April 30, 1996	2,328,567	\$0.10 - \$2.00
Granted	939,600	\$2.50 - \$3.50
Exercised	(263,429)	\$0.10 - \$1.50
Canceled	(170,151)	\$0.10 - \$3.50
Options outstanding, April 30, 1997	2,834,587	\$0.10 - \$3.50

11. Research and Development

	1997	1996	1995
Gross research and development	\$ 6,166,194	\$ 4,616,997	\$ 2,306,932
Investment tax credits	(274,580)	_	(462,625)
Net research and development	\$ 5,891,614	\$ 4,616,997	\$ 1,844,307

Investment tax credits of \$411,035 (1996 - \$nil, 1995 - \$432,375) were also deducted from cost of sales.

years ended April 30, 1997, 1996 and 1995

(Canadian dollars)

12. Changes in Non-Cash Working Capital Items

Net inflow (outflow) of cash related to the following:

	1997	1996	1995
Accounts receivable	\$ (4,805,501)	\$ 2,732,283	\$ (3,308,816)
Unbilled receivables	(1,394,254)	(299,529)	278,466
Due from (to) affiliate	(217,477)	(2,672,546)	2,742,897
Refundable investment tax credits	326,447	-	(6,153)
Prepaid expenses and other current assets	(534,442)	(58,580)	(46,316)
Accounts payable and accrued liabilities	1,383,121	1,074,419	373,272
Taxes payable		(119,205)	109,205
Deferred revenue	1,661,157	(383,555)	617,139
	\$ (3,580,949)	\$ 273,287	\$ 759,694

13. Government Assistance

The Company entered into an agreement under the Technology Partnership Program whereby the Company is eligible to receive 30% of its expenditures to a maximum of \$1,675,706 for the development of certain products. Under the agreement, the Company will pay a royalty on gross product revenues at a rate of 1.5% for the period from May 1, 1997 to April 30, 2000 and 2% thereafter until the repayment ceiling of \$2,440,000 is reached. As at April 30, 1997, the Company recorded a receivable of \$794,465 under the program of which \$591,681 was applied to reduce current year research and development costs and \$202,784 was deferred to offset future expenditures.

14. Revenue

During the fiscal year ended April 30, 1997, sales of approximately \$6,124,000 were made to one customer which represents 29% of the Company's total revenue. In 1996, sales to a different customer totaled approximately \$4,818,000 (1995 – \$6,508,000) which represented 48% (1995 – 65%) of the Company's total revenue.

15. Comparative Figures

Certain of the 1996 and 1995 comparative financial statement figures have been reclassified so as to conform to the presentation adopted in 1997. There is no impact on net income related to these reclassifications.



BOARD OF DIRECTORS

Dr. Terence H. Matthews, OBE

Chairman of the Board Chief Executive Officer, Newbridge Networks Corporation

James C. Avis*

Executive Vice President Business Development and General Counsel, Newbridge Networks Corporation

Dr. James Beresford *

Chief of Obstetrics and Gynecology Newton-Wellesley Hospital, Wellesley, Massachusetts

Peter D. Charbonneau, B.Sc., MBA, C.A. *

President and Chief Operating Officer Newbridge Networks Corporation

Joe Culp *

Chairman of the Audit Committee
President, Culp Communications Associates, Austin, Texas

Jim Elder*

Chairman of the Compensation Committee President, Allegro Computer Engineering

John Farmer

Secretary of the Board
Assistant Corporate Secretary, Newbridge Networks Corporation

Dr. Gordon Jenkins*

Formerly Vice President, Dupont Europe

Roger Maggs *

Managing Director, Celtic House Investment Partners

Rick Schmalt

Vice President, Sales and Marketing of the Corporation

John Selwyn*

President and Chief Executive Officer of the Corporation

- Audit Committee Member
- * Compensation Committee Member

Senior Executive Officers

John Selwyn

President and Chief Executive Officer

Steven E. Spooner, C.A.

Vice President, Finance and Administration and Chief Financial Officer

Ella Mai

Vice President, Product Development

Bernie Eischen

Vice President, General Counsel

Rick Schmaltz

Vice President, Sales and Marketing

Legal Counsel

Osler, Hoskin and Harcourt Ottawa, Ontario

Auditors

Deloitte and Touche Chartered Accountants Ottawa, Ontario

Notice of Annual Meeting of Shareholders

Thursday, October 16, 1997 Ottawa Congress Center 55 Colonel By Drive Ottawa, Ontario, Canada

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K2K 2W5 Canada
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Investor Relations

If interested in receiving financial information from CrossKeys Systems Corporation please contact: Director, Business Relations CrossKeys Systems Corporation

350 Terry Fox Drive Kanata, Ontario K2K 2W5 Canada

CrossKeys and the CrossKeys logo are registered trade marks. All other trade marks are the property of their respective holders.

In this annual report the term "partnership" is referred to mean that the partner and CrossKeys have agreed to cooperate to achieve the stated objectives, however it does not necessarily imply that a legal partnership has been established.

CrossKeys was awarded ISO 9001 certification in March 1995.

CrossKeys has been voted one of Canada's 50 Best Managed Private Companies, an award sponsored by Arthur Andersen & Co. and The Financial Post, for both 1995 and 1996.

In May 1996 CrossKeys was presented with the Canadian Advanced Technology Association's (CATA) Award for Emerging Technology. privade



- Canada
- - United States
- Herndon, VA△ Canton, GA
- △ Canton, GA

 △ Phoenix, AZ
- United Kingdom
- Maidenhead, England △ Hong
- South America
- △ Rio de Janeiro, Brazil
- Germany

 △ Frankfurt
- Asia Pacific
- France A Paris
- Australia

 △ Melbourne



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Doug Millar, MainStreet Studios

Pre-Press and Printing Studio Colour Group and The Lowe-Martin Group